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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,940	12/10/2003	David M. Callaghan	03AB118A/ALBRP331USA	6914
7590 Susan M. Donahue Rockwell Automation 704-P, IP Department 1201 South 2nd Street Milwaukee, WI 53204			EXAMINER TERMANINI, SAMIR	
			ART UNIT 2178	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			03/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/731,940	CALLAGHAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Samir Termanini	2178	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/29/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### BACKGROUND

1. This action is responsive to the following communications: Application filed on 12/10/2003.

2. Claims 1–33 are pending in this case. Claims 1, 13, 24, 28, and 32 are in independent form.

3. The information disclosure statement (IDS) filed on 10/29/2004 has been acknowledged and considered by the examiner. The initialed copy of form PTO-1449 is included in this office action.

### Claim Rejections - 35 USC §101

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. §101 that form the basis for the rejections under this section made in this Office action:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 25–27 are rejected under 35 U.S.C. §101 because the claims are directed to neither a “process” nor a “machine,” but rather attempts to embrace or overlap two different statutory classes of invention set forth in 35 U.S.C. §101, which is drafted so as to set forth the statutory classes of invention in the alternative only.

In the interest of advancing prosecution claims 25–27 are being examined as if their preamble's instead read: “The method of claim....”

6. Claims 29–31 are rejected under 35 U.S.C. §101 because the claims are directed to neither a “process” nor a “machine,” but rather attempts to embrace or overlap two different statutory classes of invention set forth in 35 U.S.C. §101, which is drafted so as to set forth the statutory classes of invention in the alternative only.

In the interest of advancing prosecution claims 29–31 are being examined as if their preamble's instead read: “The system of claim....”

7. Claims 16-28, 30, and 42-43 are rejected under 35 U.S.C. §101. Although the word “system” appears in the preamble, the claims actually appear to be directed to software that is not embodied on a computer-readable medium. Accordingly, the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. §101. They are clearly not a series of steps or acts, to be a process, nor are they a combination of chemical compounds to be a composition of matter.

#### CLAIM REJECTIONS - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-5, and 7-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Chapman et al. (US 2004/0021679 A1).

As to independent claim 1, *Chapman et al.* describe(s): A system that provides remote visualization of a device's faceplate ("...utilizing a large number of faceplates displayed at any one time...", para. [0626]), comprising: an interface component that retrieves a stream of SVG information that includes data representative of the device's physical faceplate ("...rendering engine--include Scalable Vector Graphics (SVG) from the W3C...", para. [0220]); and a display component that executes the stream of SVG information to render an interactive graphical representation of the device's faceplate within a remote viewing window ("...This initialisation [sic] service allows the data source manager to pass a stream containing a data source definition to the data source. This data source definition contains the information necessary for a data source to construct and initialise[sic] its data reference object model...", para. [0299]).

As to dependent claim 2, which depends from claim 1, *Chapman et al.* further disclose(s): The system of claim 1, the stream of SVG information comprises a finite set of data embedded within an XML markup language-based file ("...engine uses a series

of binding definitions supplied from the HTML/XML display file that defines how to map data from data reference object models to the display page..., para. [0375]).

As to dependent claim 3, which depends from claim 1, *Chapman et al.* further disclose(s): The system of claim 1, the stream of SVG information is obtained in real-time from the device ("...for the provision of real-time process data to a state-of-the-art user interface. That is, the preferred embodiments make use of synergies that are possible from the interaction between the operator framework and the rendering engine..., para. [0056]).

As to dependent claim 4, which depends from claim 1, *Chapman et al.* further disclose(s): The system of claim 1, the interface is a Web browser ("...web browser environment is able to display the same pages as those shown in, say, FIG. 2, with live data updates..., para. [0169]).

As to dependent claim 5, which depends from claim 1, *Chapman et al.* further disclose(s): The system of claim 1, the graphical representation is rendered within one of a Web browser and an open software package ("...flexibility extends all the way to the web browser environment. In a Hendrix-based system, the web browser environment is able to display the same pages as those shown in, say, FIG. 2, with live data updates. The preferred embodiments thus deliver the ability to view process data in a web browser.....", para. [0169]).

As to dependent claim 7, which depends from claim 1, *Chapman et al.* further disclose(s): The system of claim 1, the graphical representation provides for

viewing ("...viewing...", para. [0856]), recording ("...methods when storing faceplate preferences...", para. [0641]), and effecting device operation ("...which will cause it to query all open faceplates for their position information...", para. [0640]).

As to dependent claim 8, which depends from claim 1, *Chapman et al.* further disclose(s): The system of claim 1, the graphical representation depicts is dynamically updated to reflect a current state of the device's physical faceplate ("...the page is updated with data from the Hendrix data binding engine upon which the HTML rendering engine re-renders the display page so that the user sees the changes to the page ...," para. [0267]).

As to dependent claim 9, which depends from claim 1, *Chapman et al.* further disclose(s): The system of claim 1, the graphical representation comprises a state a status ("...status information...", para. [0243]).

As to dependent claim 10, which depends from claim 1, *Chapman et al.* further disclose(s): The system of claim 1, the graphical representation further depicts a chart and a graph to monitor device performance ("...chart....," para. [0993]).

As to dependent claim 11, which depends from claim 1, *Chapman et al.* further disclose(s): The system of claim 1, the graphical representation can be stored for future analysis ("...is formed when display page elements are contained within a HENDRIX...", para. [ENCAPSULATION element and is stored in a separate file. The following example the encapsulation of a span tag that displays LCN.A100.PV and is stored in the file SimplePaceplate.htm 19]).

As to dependent claim 12, which depends from claim 1, *Chapman et al.* further disclose(s): The system of claim 1 is employed in an industrial environment ("...frequently used in industrial settings...", para. [0003]).

As to independent claim 13, *Chapman et al.* describe(s): A system that provides access to a device from a remote Web interface ("...web browser environment ..., " para. [0142]), comprising: a data conveying component that is utilized to stream device-related data ("...allows the data source manager to pass a stream containing a data source ..., " para. [0299]); an interface component that couples the data conveying component to a device residing on a network ("...the data source manager for the lifetime of the data source manager and provides an opportunity for a data source implementation to share resources such as network connections between data sources (concurrently and serially). ..., " para. [0669]); and a network browser that retrieves a stream of data from the device and generates a graphical depiction of the device based on the information within the stream of data ("...source manager to pass a stream containing a data source definition to the data source..., " para. [0299]), the graphical depiction provides a user with access to the device ("...a single property that represents the value ..., " para. [0315]).

As to dependent claim 14, which depends from claim 13, *Chapman et al.* further disclose(s): The system of claim 13, the stream of data is based on a Scalable Vector Graphics XML markup language ("...engine uses a series of binding definitions supplied from the HTML/XML display file that defines how to map data from data reference object models to the display page..., " para. [0375]).



As to dependent claim 15, which depends from claim 13, *Chapman et al.* further disclose(s): The system of claim 13, the stream of data is stored local to the device or the network ("...Allows the user to store values in a local repository...", para. [0511]).

As to dependent claim 16, which depends from claim 13, *Chapman et al.* further disclose(s): The system of claim 13 further comprises a firewall that provides secure communication between the network browser and the device ("...The data source manager provides an execution environment for data sources that includes a number of services that they require in order to provide efficient, secure access to data...", para. [0664]).

As to dependent claim 17, which depends from claim 13, *Chapman et al.* further disclose(s): The system of claim 13 is employed in an industrial environment ("...used in many industrial domains...", para. [0467]).

As to dependent claim 18, which depends from claim 13, *Chapman et al.* further disclose(s): The system of claim 13, the graphical depiction comprises a virtual representation of a physical faceplate associated with the device ("...in environment faceplate custom faceplate frame window....", para. [0490]).

As to dependent claim 19, which depends from claim 18, *Chapman et al.* further disclose(s): The system of claim 18, the virtual representation of the physical faceplate comprises a status ("...status information...", para. [0243]).

As to dependent claim 20, which depends from claim 13, *Chapman et al.* further disclose(s): The system of claim 13, the graphical depiction displays device performance information in a chart ("...This type of behaviour is probably most appropriate for large, complex controls with numerous font selection properties, such as a chart...", para. [0993]),.

As to dependent claim 21, which depends from claim 13, *Chapman et al.* further disclose(s): The system of claim 13, the graphical depiction is utilized to effectuate device operation ("...visualisation of blast furnace arrays and the displaying of hot spots in the furnace in 3D...", para. [0195]).

As to dependent claim 22, which depends from claim 13, *Chapman et al.* further disclose(s): The system of claim 13 further comprises intelligence comprising a statistic a probability an inference and a classifier to facilitate at least one of locating the file executing the file and interacting with the device via the graphical depiction ("...Once a property's quality value is set, it is up to the control/behaviour As to how it represents that quality indication visually...", para. [0932]).

As to dependent claim 23, which depends from claim 22, *Chapman et al.* further disclose(s): The system of claim 22, the graphical depiction is dynamically updated to reflect a current state of the device's physical faceplate (with live data updates...", para. [0169]).

As to independent claim 24, *Chapman et al.* describe(s): A method to interact with a device through a remote interface comprising: creating a file that

represents at least one aspect of the device ("...components are informed of the data requirements for a particular display page by means of a data source definition ...," para. [0042]); storing the file with the device ("stored as part of an HTML/XML display page file...," para. [0042]); employing a remote interface to access the file ("...a data source definition that is stored as part of an HTML/XML display page file...," para. [0042]); and utilizing the file to generate a graphical representation of the at least one aspect of the device within the remote interface ("...XML tags in the display page file that define the details of what data is required by the display page and how to apply that data to the display page...," para. [0268]).

As to dependent claim 25, which depends from claim 24, *Chapman et al.* further disclose(s): The system of claim 24, the file is based on a Scalable Vector Graphics (SVG) XML markup language ("...XML tags in the display page file that define the details of what data is required by the display page and how to apply that data to the display page...," para. [0268]).

As to dependent claim 26, which depends from claim 25, *Chapman et al.* further disclose(s): The system of claim 25 further comprises employing ACSII drawings commands to execute the instructions embedded within the SVG XML file to draw the graphical representation ("...commands between the data source components and the display page elements. FIG. 12 ...," para. [0245]).

As to dependent claim 27, which depends from claim 24, *Chapman et al.* further disclose(s): The system of claim 24 further comprises employing an open

software package to display the graphical representation ("...software applications provided by the provider of the system...", para. [0206]).

As to independent claim 28, *Chapman et al.* describe(s): A method that renders device-related graphics from streamed SVG information within a Web-based interface ("...web browser environment ...," para. [0142]), comprising: establishing a connection with a network associated with a device ("...allows the data source manager to pass a stream containing a data source ...," para. [0299]); retrieving a stream of SVG information associated with the device ("...Scalable Vector Graphics (SVG)...," para. [0220]); and executing the stream of SVG information within the remote interface to draw a dynamically updated interactive graphic of the device ("...Once a property's quality value is set, it is up to the control/behaviour as to how it represents that quality indication visually...", para. [0932]).

As to dependent claim 29, which depends from claim 28, *Chapman et al.* further disclose(s): The system of claim 28 further comprises generating an SVG file with information related to a physical faceplate of the device ("...utilizing a large number of faceplates displayed at any one time...", para. [0626]).

As to dependent claim 30, which depends from claim 28, *Chapman et al.* further disclose(s): The system of claim 28 further comprises employing intelligence to facilitate at least one of locating the SVG information ("...locating the file within that search path...", para. [0805]), executing the SVG information and interacting with the device via the interactive graphic ("...display begins executing...", para. [0493]).

As to independent claim 13, *Chapman et al.* describe(s): A system that provides access to a device from a remote Web interface ("...web browser environment ...," para. [0142]), comprising: a data conveying component that is utilized to stream device-related data and an interface component that couples the data conveying component to a device residing on a network ("...the data source manager for the lifetime of the data source manager and provides an opportunity for a data source implementation to share resources such as network connections between data sources (concurrently and serially). ...," para. [0669]); and a network browser that retrieves a stream of data from the device and generates a graphical depiction of the device based on the information within the stream of data ("...source manager to pass a stream containing a data source definition to the data source...," para. [0299]), the graphical depiction provides a user with access to the device ("...a single property that represents the value ...," para. [0315]).

As to dependent claim 31, which depends from claim 30, *Chapman et al.* further disclose(s): The system of claim 30, the intelligence is based on an inference and a classifier ("...The data delivery properties include properties that control the transmission of data from the server system such as update rates or information that helps to completely identify a data item in cases where a name from a server system namespace is not sufficient. ...," para. [0317]).

As to independent claim 32, *Chapman et al.* describe(s): A system that provides Web-based visualization of a device comprising: means for retrieving a file with device-related information ("...The data reference's ID might be ParamRef1 and

the associated namespace name would be "34FC1234.PV". FIG. 16 illustrates a data source with several data references. ..., " para. [0319]); means for invoking the file within a Web-based browser ("...web browser environment...", para. [0149]); and means for graphically viewing the device related information ("...display page by means of a data source definition...", para. [0042]).

As to dependent claim 33, which depends from claim 19, *Chapman et al.* further disclose(s): The system of claim 19 further comprises means for effectuating the operation of the device via a graphical display ("...direct user input. ..., " para. [0362]).

#### CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Chapman et al.* (US 2004/0021679 A1) in view of *Lindstrom-Tamer* (US 20020124076 A1).

As to dependent claim 6, all the claim's limitations are taught or suggested by the prior art. *Chapman et al.* teach that the graphical representation is rendered within one of a Web browser and an open software package ("...flexibility extends all the way to the web browser environment. In a Hendrix-based system, the web browser

environment is able to display the same pages as those shown in, say, FIG. 2, with live data updates. The preferred embodiments thus deliver the ability to view process data in a web browser....," para. [0169]). *Chapman et al.* do not expressly disclose that the open software package is an Adobe plug-in. However, the differences in claim 6 over *Chapman et al.* were suggested in *Lindstrom-Tamer* i.e. that the open software package is an Adobe plug-in ("support of Adobe SVG plug-in as used by Internet Explorer" para. [0032]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the Adobe SVG plug-in as taught in *Lindstrom-Tamer* as the open software package with the browser *Chapman et al.* because: (1) *Lindstrom-Tamer* is in the same field of endeavor of "...displaying pages containing SVG content....," (para. [0010]); (2) *Lindstrom-Tamer* expressly suggests the desirability, and thus the obviousness, of making the combination ("Therefore, there remains a need in the art for a manner in which one could easily detect whether a client browser supports SVG output such that SVG information could be automatically transmitted or omitted depending upon whether a particular user's browser supports SVG.," para. [0009]); and (3) one of ordinary skill in the art, when confronted with the same problems as the inventor and with no knowledge of the claimed invention, would have had reasonable expectation of success in the combination of the elements from the cited references in the manner claimed because the prior art suggests the desirability for exactly the type same combination ("One of the main requirements of the architecture of the preferred embodiments is its support for third-party controls....As a

result, most third-party controls integrate smoothly into the Hendrix architecture....," para. [0901], Chapman et al.).

### CONCLUSION

10. Although not relied upon, the following prior art is made of record because it considered pertinent to applicant's disclosure:

Allen; Bruce S. et al.	US 4570217 A	Man machine interface Video interface architecture for programmable industrial control systems
Crater; Kenneth C. et al.	US 5982362 A	Architecture for dynamically monitoring computer application data
Knight, Christine N. et al.	US 20040083453 A1	Computer implemented object oriented visualization system and method
Rittie; Kevin J. et al.	US 5917730 A	System and method for providing vector editing of bitmap images
Sanborn; Frank G. et al.	US 6999101 B1	Operator station for manufacturing process control system
van Weele; Leonardus A. et al.	US 5631825 A	

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini whose telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 4 P.M., Monday through Friday (excluding alternating Fridays).

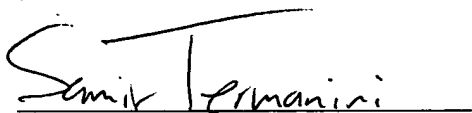
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.



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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, *see* <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Samir Termanini  
Patent Examiner  
Art Unit 2178



STEPHEN HONG  
SUPERVISORY PATENT EXAMINER